

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

690 Walnut Ave.St. 150

Vallejo, CA 94592-1133

(707) 649-5453

(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-023277**Date Inspected:** 07-May-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Kelly Leavitt, was present during the times noted above for random observations relative to the work being performed.

**Trial Assembly**

This QA Inspector observed the following work in progress for Trial Assembly.

ZPMC was using the Shielded Metal Arc Welding (SMAW) process.

ZPMC QC is identified as Zhan Hal Fang and An Qing Ziang.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA inspector.

Components; OBG 14E PP123

PCMK: VP3007-001

Weld No: 053,057

Welder: 058102

Weld Repair No. B-WR20769

WPS-345-SMAW-1G(1F)-FCM-Repair-1

Components; OBG 14E PP123

PCMK: VP3009-001

Weld No: 006,009

Welder: 058102

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Weld Repair No. B-WR20767  
WPS-345-SMAW-1G(1F)-FCM-Repair-1

Components; OBG 14 E PP128.3

PCMK: SEG3019D-2

Weld No: 189,193,188,196,212

Welder: 215553

Weld Repair No. B-WR20931

WPS-345-SMAW-3G(3F)-FCM-Repair-1

Components; OBG 14E

PCMK: SEG3019E-2

Weld No: 217,209,189,184,192

Welder: 044779

Weld Repair No. B-WR20932

WPS-345-SMAW-3G(3F)-FCM-Repair-1

This QA Inspector observed the following work in progress for Trial Assembly.

ZPMC was using the Flux Core Arc Welding (FCAW) process.

ZPMC QC is identified as Zhan Hal Fang and An Qing Ziang.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA inspector.

Components; OBG 13CE

PCMK: SA3060-003

Weld No: 003,005

Welder: 050977

WPS-B-T-2232-ESAB

Components; OBG 13CE

PCMK: SA3060-004

Weld No: 003,005

Welder: 050977

WPS-B-T-2232-ESAB

ZPMC was observed re-aligning the vertical plane of deck plate 13AE to 13BE, weld number OBE13-002, that was previously welded. The welding repair report number B-WR20680 stated “after inspection 13AE and 13BE deck plate misalignment, it was a maximum of 5mm and need to cut”. The filler metal was removed from the weld in two places, one starting at 7650mm from deck plate to end plate weld center of bridge 1500mm long, the other starting at 14330mm from deck plate to end plate weld center of bridge 480mm long. Realignment was achieved, weld joint prepped, preheat used and the weld material was replaced using the flux core arc welding method with ESAB wire. ZPMC QC is identified as Zhan Hal Fang and An Qing Ziang. (see photos)

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract

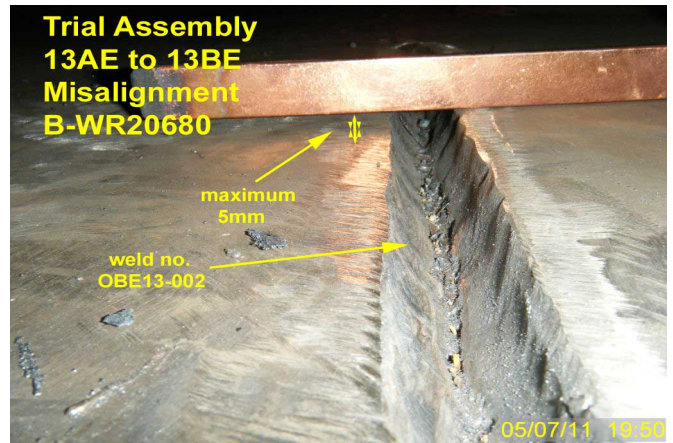
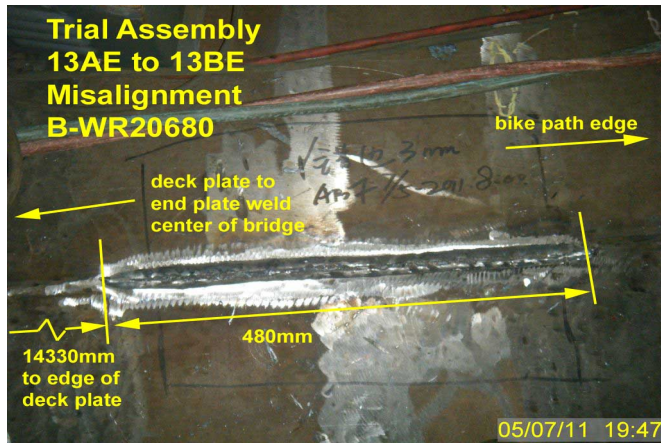
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documents.



### Summary of Conversations:

“No relevant conversations.”

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact James Devey 1500026784, who represents the Office of Structural Materials for your project.

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**Inspected By:** Leavitt,Kelly

Quality Assurance Inspector

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**Reviewed By:** Riley,Ken

QA Reviewer